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ABSTRACT

This guide introduces the skills and dispositions necessary to participate in educational action research. It targets teachers, administrators, college faculty, graduate students, state professional organizations, and state administrators. Chapter 1, "Understanding Action Research as a Tool for Professional Growth and Organizational Development," defines action research, discusses why it is important to use reflective inquiry, and lists resources for beginning researchers. Chapter 2, "A Short History of Action Research," provides background on the subject of action research. Chapter 3, "Core Practices in School and Classroom Inquiry," outlines steps found in many action research programs, discussing: the use of tools to frame the inquiry; developing a plan of action for investigation; collecting and analyzing data from multiple sources; analyzing and interpreting data from schools or classrooms; engaging in reflection and introspection; and documenting and reporting results. Chapter 4, "Examples of Action Research," provides examples of educational action research. Chapter 5, "Frequently Asked Questions about Action Research," looks at 11 commonly asked questions about action research (e.g., who conducts action research and how it is carried out). A sample action research proposal is appended. (Contains 16 annotated references.) (SM)

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The AEL Guide to Action Research

by

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Submitted to

Office of Educational Research and Improvement
U. S. Department of Education
555 New Jersey Avenue, NW
Washington, DC 20208

Submitted by

Post Office Box 1348
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November 30, 2000

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This chapter provides some examples of action research in education. Descriptions of many more action research projects can be found on-line. The chapter concludes with a list of other sources of action research summaries or full text reports.

Chapter 5
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Eleven of the most frequently asked questions about action research and brief responses are presented here. This chapter has been included to provide the beginning action

researcher with a sense of the larger context surrounding the use of action research as a tool for individual and professional growth.

Annotated References on Action Research

This bibliography of action research texts includes notes on content, organization, or best uses.

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Introduction

Purpose

The purpose of *The AEL Guide to Action Research* is to introduce readers to the skills and dispositions necessary for participating in educational action research.

Objectives

Specific objectives of *The AEL Guide to Action Research* are to assist practitioners in conducting school and classroom research by explaining how to

- frame research questions for an individual or collaborative action research project
- develop a plan of action for implementing a new practice, policy, or program affecting teaching and learning
- systematically observe the results of implementing a plan of action
- analyze and reflect on the data collected
- document and share study findings

The AEL Guide to Action Research can also be used to

- explore the potential of organizing a district- or school-based network of action researchers
- learn about resources available in print or through electronic discussion lists and the World Wide Web

Audience

The audience for *The AEL Guide to Action Research* includes teachers and administrators in grades K-12, college and university professors, graduate students, state department of education personnel, state professional organizations, and representatives of intermediate service agencies who organize programs for teacher action research.

Action research programs are often sponsored by state departments of education, regional education laboratories, individual school districts, and state professional associations or leadership academies. *The AEL Guide to Action Research* may be used as a reference in planning, conducting, and evaluating the impact of an action research course or professional development program.

The AEL Guide to Action Research describes strategies used by education practitioners and provides resources for learning more.

Acknowledgements

The author would like to thank Dr. Jane Hange and Nancy Balow of AEL for guidance in making this publication possible. Thanks also go to Graham Crookes and Jack Whitehead for their information and timely assistance. A very special thanks goes to the contributors and supportors of <AELACTION@ael.org> Additional AEL staff whose expertise was essential to producing *The AEL Guide to Action Research* include Carolyn Reynolds, Nancy Balow, Marilyn Slack, Carole Berry, Carolyn Luzader, and Carla McClure.

About the Author

Douglas S. Fleming is President of School Strategies & Options in Lunenburg, Massachusetts. He and his wife Barbara provide schools and districts with information, assistance, and training in team building, group problem solving, and school planning. Their company also works with organizations and associations that develop teacher leaders. Workshops, institutes, and seminars include teaching in a block schedule, applying school-based decision making, developing an interdisciplinary curriculum, and using multiple assessment approaches.

Doug has served as researcher for the National Education Association's (NEA) Mastery Learning Project and Learning Laboratory programs. He moderated sessions on restructuring and school change for the NEA School Renewal Network, an early telecommunications network and searchable database serving schools from Maine to Hawaii. He worked with several of the NEA National Center on Innovation sites in compiling their learning histories, a structured process of reflection and analysis on managing school change initiatives. Doug facilitated school-based action research projects with the New Hampshire School Improvement Project, the Vermont Challenge Grant Schools, and the Rhode Island Educational Leadership Academy. He is currently helping several districts to organize action research programs as alternatives to traditional teacher evaluation systems.

Doug is co-moderator of the discussion list AELACTION, hosted by AEL. He and Dr. Jane Hange encourage exchange of action research stories, respond to questions about action research, raise questions about data collection and reflection, and suggest resources on the process and content of action research projects. Doug has developed several graduate level courses for promoting teacher reflection. Classroom Coaching is a site-based and face-to-face program. Inquiry and Action in Schools and Classrooms can be conducted via e-mail. Each provides three optional graduate credits through Fitchburg State College, Fitchburg, Massachusetts.

To send Doug questions or suggestions about *The AEL Guide to Action Research*, contact him by e-mail at dfleming@tiac.net.

Chapter 1

Understanding Action Research As a Tool for Professional Growth and Organizational Development

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Understanding Action Research as a Tool for Professional Growth and Organizational Development

This chapter presents a definition of action research, a rationale for reflective inquiry into practice, steps in conducting action research, and a concise list of print, media, and on-line resources for the beginning action researcher.

- How can a textbook be written to be more engaging? Is there a way to get kids engaged positively?
- How can I use popular literature to develop a window to science content?
- How do we get parents interested in promoting their kids' literacy?
- I'd like to explore the impact that the use of wordless picture books has on kids' oral language development?

These questions get to the heart of teaching and learning. They are ideal starting points of action research.

What Is It?

Defining Action Research

Action research is a systematic inquiry into a school or classroom situation with the intent of improving the quality of teaching and learning and gaining a deeper understanding of the complex context in which it occurs.

In education settings, teachers raise questions about school or classroom practices, develop plans for testing or investigating their questions, and systematically observe the results of their action plans on student performance. The process leads to reflection, analysis, and informed decision making about the practice, the role of the teacher, and the setting in which the practice occurs.

Action research is more than "fixing things" or finding solutions to school and classroom concerns or problems. It invites self assessment ("What does this teach me about myself?") and organizational analysis ("What are we doing or not doing that is contributing to the situation?"). The action researcher examines the essential components of a situation, develops a plan that seeks improvement, gathers and uses data impartially, makes meaning from the experience, and shares the findings in public. Action research occurs in roughly four stages—but these are not of equal duration or intensity. Action research is both cyclical and iterative. One set of questions often results in new sets of questions leading to further exploration.

Figure 1: An Action Research Cycle

Why Do It?

In order for education research, theory, and practices to have a greater impact on student achievement, teachers need ways to accurately and systematically define, apply, and assess the success of specific policies, programs, and procedures. Action research can be an important dimension of professional growth.

- It respects teacher experience. The ones who take the actions frame the questions.
- It provides opportunity for reflection and decision making. The methods can be applied again and again in classrooms.
- It increases the likelihood of trying new practices. Action research encourages teachers to question things that were previously accepted without challenge.
- It validates effective strategies in teaching and learning. Through multiple measures of data collection and analysis, teachers reach objective conclusions about classroom practices.
- It forms the basis for teacher networking, collegial conversation, and authentic collaboration. The process of action research can potentially influence the culture of the classroom, school, and organization in which it takes place.

How Is It Done?

There are variations on action research, including individually conducted action research on a classroom issue, collaboratively conducted action research on classroom issues, and collaboratively conducted action research on schoolwide or district themes. The underlying processes, however, are the same.

1. Framing the Inquiry—
   Defining a problem or question to investigate
2. Developing a Plan of Action
3. Collecting and Analyzing Data
4. Engaging in Reflection/Introspection
5. Documenting/Reporting of Results
6. Taking the Next Step

Figure 2: Steps in Action Research

Action research occurs in cycles. In order to learn the most about a particular practice or intervention, the cycle of planning, acting, observing, and reflecting is often repeated, successively, perhaps several times. Each cycle produces new knowledge—including more and better questions—that can be applied in subsequent cycles. One characteristic of action research is that the learning never ends—findings lead to new investigations. The process may allow more than one investigation to be conducted at the same time.

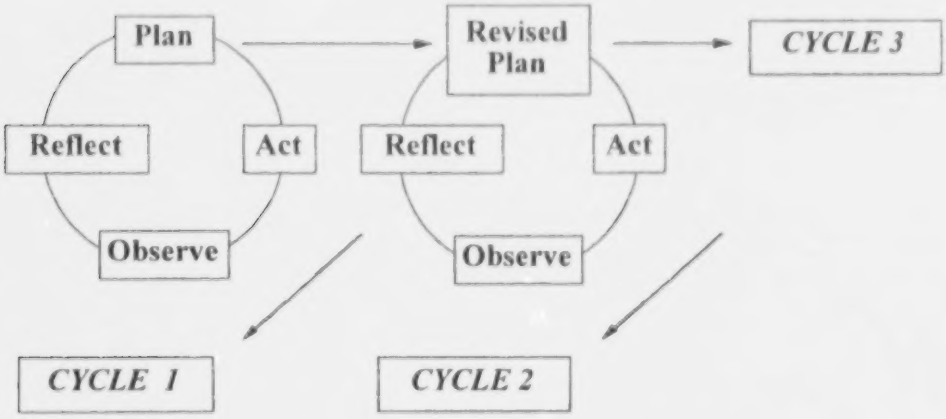

Figure 3: Cyclic Nature of Action Research

Source: Carr, W. & Kemmis, S. (1986). *Becoming critical: Education knowledge, and action research.* Philadelphia, PA: Falmer Press.

Where Can I Learn More about the Tools and Process of Action Research?

Three useful books for understanding action research are:

Calhoun, E. F. *How to use action research in the self-renewing school.* Alexandria: Association for Supervision and Curriculum Development, 1994.

Kochendorfer, L. *Becoming a reflective teacher.* Washington: National Education Association, 1994.

Sagor, R. *How to conduct collaborative action research.* Alexandria: Association for Supervision and Curriculum Development, 1992.

Two videotapes that illustrate action research are:

Teacher TV Episode 11—*Alternative Assessments.* National Education Association, Washington, DC: 1992. Shows student-led parent conferences and student goal setting, piloted at Amanda Arnold Elementary School in Manhattan, Kansas.

Teacher TV Episode 21—*Students and Teachers as Researchers.* National Education Association, Washington, DC: 1993. Shows first grade teachers at New Stanley Elementary School in Kansas City, Kansas, providing activity choices (book projects, learning centers) and using "kidwatching," photography, and teacher journaling to observe and document results.

How Can I Stay Connected with Other Action Researchers?

AEL maintains a free electronic discussion list where you can post questions, exchange action research stories, get responses to action research proposals or receive suggestions on the process and content of your action research program. To join aelaction:

Send an e-mail message to:

majordomo@ael.org

Leave the subject line blank.

In body of message, type:

subscribe aelaction <your e-mail address>

You will be notified via return mail.
After that, send <u>your</u> messages to:

aelaction@ael.org

Figure 4: AEL Action Subscription Information

The World Wide Web offers many sites with action research reports, research syntheses, and articles about action research designs and data collection methods (interviews, journaling, observations). A short list of sites with links to other useful places follows.

Action Research Collaborative of Greater St. Louis
This collaborative of teachers, administrators, teacher educators, and other educational stakeholders is developing a database of action research project descriptions from kindergarten through post secondary.

http://info.csd.org/WWW/resources/arc/arc.html

Action Research Resources
Links to action research and related resources are provided by Bob Dick at Southern Cross University, Australia.

http://www.scu.edu.au/schools/sawd/ari/ar.html

Action Research at Queen's University
This site at Queen's University, Kingston, Ontario, Canada, was developed from a university course utilizing action research. It has been expanded to include a range of additional materials, including descriptions of action research projects. Links to other Web sites.

http://educ.queensu/ca/projects/action_research/Queensar.htm

Action Research Special Interest Group
The American Educational Research Association sponsors a special interest group on Action Research. The focus is on collaborative action research that involves teachers, administrators, researchers, and community members in the examination of practices that encourage educational reform and improvement.

http://coe2.tsuniv.edu/ar-sig

Action Research on the Web
Developed by Ian Hughes, Faculty of Health Sciences at the University of Sydney, Australia, this site contains a number of on-line articles that provide helpful information about the action research process.

http://www.cchs.su.edu/AROW

Classroom Action Research
A collection of action research abstracts from the Madison, Wisconsin, public schools. Teachers, principals, support staff, and other educators systematically study issues over the course of a school year in order to reach a better understanding of how they teach and why, how students learn best, and how to facilitate that learning.

http://www.madison.k12.wi.us/sod/car

Jack Whitehead's Action Research Homepage
Descriptions of action research projects developed by doctoral students at Bath University in Great Britain.

http://www.bath.ac.uk/~edsajw

The Scottish Teacher Researcher Support Network
A network dedicated to bringing together, in order to share ideas and experience, practitioners in education and experienced researchers willing to help.

http://www.ed.ac.uk~webscre/STRSN.html

ARLIST-L
Respond to or post questions or comments about action research projects to this discussion list maintained by Southern Cross University in Australia.

To subscribe, use your e-mail to send a message to: *LISTPROC@SCU.EDU.AU.* The message should read: *SUBSCRIBE ARLIST-L your_name.* To contribute to the discussion, send your e-mail message to: ARLIST-@SCU.EDU.AU.

XTAR
XTAR is an e-mail discussion list that encourages teacher researchers to share their inquiries, questions, findings, insights, problems, and suggestions.

To subscribe, send a message to: *listserv@lester.appstate.edu*
Skip the Subject line. In the body of the message write: *Subscribe XTAR <your name>*

Chapter 2

A Short History of Action Research

Chapter 2

A Short History of Action Research

This chapter provides background on the subject of action research, starting with a brief chronology of action research as it appears in the literature. It explores some definitions of action research and presents a typology of action research "models" in use throughout the world today.

The origins of action research are obscure. A careful study of the literature by McKernan (1991) and others suggests that action research is a derivative of the "scientific method" and is rooted in the Science and Education movement of the late 19th century. Although many might argue that there is no one correct "scientific method" or procedure, science is taught as a disciplined procedure of careful observation, questioning, hypothesis formulation, data collection, analysis, and generalization.

The concept of action research can also be found in the early works of John Dewey in the 1920s and Kurt Lewin in the 1940s. Lewin was a social psychologist whose model involved a "spiral of cycles" in which problem analysis led to fact finding, conceptualization of an inquiry, then planning of a "action program" to implement a solution set, followed by evaluation, from which new problems or questions emerged. Kemmis & McTaggert (1988), Zuber-Skerrit (1992), Holter & Schwartz-Barcott (1993), and McKernan (1991) support this view.

Stephen Corey and others at Teachers College of Columbia University introduced the term "action research" to the education community in 1949. Corey (1953) defined action research as the process through which practitioners study their own practice to solve their personal practical problems. While Corey had more limited claims than Lewin for the results of action research, both supported the incorporation of group work in the action research process because of the power of group interaction to produce commitment and change in attitude and behavior.

Interest in action research declined between 1953 and 1957. University scholars attacked action research as methodologically poor and unscientific. Others argued that teachers did not have the time to do research, and the time they did put into research detracted from their teaching.

During the 1960s and 1970s, action research in the United States became inquiry done with the help of a consultant. Action research was viewed as a way to provide professional development and to improve practice, rather than to produce generalizable results or theory. In Britain, however, the practice was promoted more vigorously.

In the mid 1970s an expanded view of action research in education began to emerge—that of a collaborative venture which simultaneously contributed to knowledge in the field and improved practice. Researchers began to articulate the value of qualitative research methods that allow them to develop "theoretically grounded" critical accounts of "what happens," which lead to an understanding of both practice and "underlying social processes."

Action research in the 1980s and 1990s has emphasized the collaborative and interactive dimensions of teachers questioning and examining school and classroom practices. Although action research is more widely accepted as a viable method for conducting

educational research that contributes to the field, improved practice, and changes in school or district policy, there is still plenty of room for counter argument.

There are subtle and not so subtle differences in the way action research is defined, introduced, used, and portrayed in the United States and in other countries. Some of the many, and still evolving, definitions for action research include:

> "Action research is a three-step spiral process of (1) planning, which involves reconnaissance or fact finding; (2) taking actions; and (3) fact-finding about the results of the action." Lewin (1947)
>
> "Action research is a process by which practitioners attempt to study their problems scientifically in order to guide, correct, and evaluate their decisions and actions." Corey (1953)
>
> "trying out new practices as a means of improvement and as a means of increasing knowledge about the curriculum, teaching, and learning." Kemmis & McTaggert (1982)
>
> "small scale intervention in the functioning of the real world and a close examination of the effects of such intervention." Cohen & Manion (1985)
>
> "a form of collective self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out." Kemmis & McTaggert (1990) p. 5
>
> "Systematic inquiry that is collective, collaborative, self-reflective, critical, and undertaken by participants in the inquiry." McCutcheon & Jung (1990) p. 148
>
> "Action research is conducted by people who want to do something to improve their own situation." Sagor (1992) p. 7
>
> "Action research is a fancy way of saying 'Let's study what's happening at our school and decide how to make it a better place.'" Calhoun (1994) p. 1

While there is some lack of agreement about the definition of action research and how it is practiced, four themes cut across these various definitions. They are (1) active involvement of the participants in a situation being studied (some would say "empowerment"), (2) increased collaboration and communication, (3) development of new knowledge and understandings that lead to (4) changes in practices, beliefs, or policies. The processes of action research occur in iterative cycles of planning, acting, observing, and reflecting.

Dick (1997) describes action research as a "family of methodologies which pursue outcomes of both action (change) and research (understanding)" and which alternate between action and systematic reflection. The many forms of action research include participative action research, emancipatory action research, action science, and soft systems methodology.

Three of the major "camps" of action research are described below. These are meant to be representative, and not an exhaustive description of different views of how action

research can be conducted. The typology was adapted from the work of Masters (1995) and others.

Technical-Scientific

The researcher tests a particular intervention based on a pre-specified theoretical framework, collaborating with other practitioners in a technical and facilitative role. The researcher identifies a problem and a specific intervention. The major thrust is on problem solving, validation, and refinement of existing theories. Technical action research promotes more efficient and effective practice. The process is deductive and characterized by measurement and quantification, cause and effect analysis. There is little methodological distinction between empirical research and this type of action research. The world-view of this approach may be characterized as teacher-as-researcher.

Mutual-Collaborative

The action researcher and other practitioners come together to identify potential problems, their underlying causes, and possible interventions. The problem is defined through dialogue and a mutual understanding is reached. The goal is to deeply understand practice and to solve immediate problems. The emphasis is on interpretation and reflection leading to development of meaning. The problem is not defined in advance. The approach is inductive and dialogic. Events are interpreted and understood through conversation and reflection. The changes that result tend to be connected to the individuals involved and the interventions may be short-lived when these individuals leave the system. The action researcher tries to understand what is happening in the situation and the meaning people are making from experience. McKernan (1991) observes that this model of action research trades off some measurement and control for interpretation, interaction, negotiation, and detailed description. The worldview of this approach may be described as "reflective practitioner."

Critical-Emancipatory

Emancipatory action research "promotes emancipatory praxis in the participating practitioners; that is, it promotes a critical consciousness which exhibits itself in political as well as practical action to promote change." Grundy (1987). The action researcher is concerned both with the problem in a particular setting and the theory used to explain and resolve the problem. The emphasis is on raising collective consciousness of situations and decisions related to equity and social or economic conditions through reflection and critique. The action researcher identifies "inherent contradictions between the process of education and the needs of the institutions within which education is supposed to happen." (Crookes 1993) A three-phase process underlies critique: theory, enlightenment, and personal action. This mode of action research does not begin with theory and end in practice, but is informed by theory and the internal struggle of problems and practice. The world view of this approach is often termed participatory action research, in part because it seeks to involve an ever-widening circle of participants in questioning and understanding the roles and policies of organizations.

Action researchers may use a similar overall process (planning, acting, observing, reflecting), but individual programs place greater or lesser importance on specific dimensions of these elements. Some programs devote attention to components such as needs assessments, analytical discourse, and vision building in the planning phase of

collaborative action research. Other programs spend more time on writing workshops, graphic representations, and similar devices intended to assist with problem formulation and choosing a focus. Some action research programs tend to get teachers to "fix" or change things rather than to understand the situation or social context in which the question resides. Others regard the specific questions and action strategies as superfluous, and refine the skills and craft of storytelling and teacher reflection.

While there can be no one standard method or procedure for research that begins with the questions of practitioners, action researchers are encouraged to continually question their hypotheses, data sources, research methods, findings, and conclusions, and to involve others as critical friends to reduce bias and distortion.

For a more detailed treatment of this topic, see these Web sites.

Masters, J. (1995). The History of action research. In I. Hughes, Ed. *Action Research Electronic Reader*. Sydney, New South Wales, Australia: The University of Sydney. Available on-line at http://www.behs.cchs.usyd.edu.au/arow/Reader/rmasters.htm.

Crookes, G.V. (1993). Action research for ESL teachers—Going beyond teacher research. Honolulu, Hawaii: The University of Hawaii
Available on-line at http://www.lll.hawaii.edu/esl/crookes/acres.html.

Specific references used in developing this short history include:

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Chapter 3

Core Practices in School and Classroom Inquiry

Chapter 3

Core Practices in School and Classroom Inquiry

This chapter outlines the steps found in many action research programs. It discusses using tools to frame the inquiry, developing a plan of action for school or classroom investigation, collecting and analyzing data from multiple sources, analyzing and interpreting data from a school or classroom study, engaging in reflection and introspection, and finally, documenting and reporting results. This chapter was written with the beginning action researcher in mind. The alternative approaches and options presented are drawn from a variety of action research models, and do not represent "one best way" to conduct classroom inquiry.

Step 1: Framing the Inquiry

There are a variety of approaches and tools to help the action researcher choose a focus and identify a question to pursue through action research.

Deciding what is most important to you and narrowing your question about teaching and learning so that it is both observable and realistic to investigate within the allotted time frame can be a challenging task. What follows is a collection of activities and exercises that others have found helpful in getting to the essence of the inquiry. Not all tools work equally well in all action research settings. This may require some selection or interpretation on the part of the action research facilitator or teacher mentor during the planning phase.

Reflective Interviewing

Sagor (1992) describes this technique in which one participant interviews another for twenty to thirty minutes, allowing the person being interviewed to fully and deeply explore feelings and ideas on an issue of personal concern. The interviewer assists by asking clarifying questions and providing probes. The interviewer does not take over or interfere with the other person's reflections or decisions. The purpose of the reflective interview is to enable teachers to focus on

- an issue involving teaching and learning
- something they can influence within the classroom or school
- something they care deeply about

Action research allows you to frame these issues as questions for investigation.

Drafting a Problem Statement

A problem statement is a concise description of the situation (about 100 words) that captures its important elements.

1. ***Who* is affected.** Identify the specific individuals or groups affected by the problem.

2. ***How* they are affected.** Identify how *each* group or individual is affected by the situation. Not all groups or individuals will be affected in the same way.

3. ***Who* or *what* is suspected of causing the problem.** Identify *possible* causes of the situation. Looking at the situation or problem from multiple points of view may help in identifying more than one possible cause.

4. **What *variables* or *forces* exist** in the situation or problem. Identify the factors that might be contributing to or influencing the situation.

5. What **desired *outcome*** is sought. What would you like to achieve in addressing the problem? Clarify what "success" might include or look like in identifying a solution.

6. What ***action steps*** might bring about improvement. What will you have to *do* to bring about change?

Identifying Baseline Data

In education action research, baseline data is information collected about student performance and the context in which learning occurs before implementation of a schoolwide action plan or classroom intervention. The baseline information can be used later to assess the impact of the program, policy, or practice. Two types of baseline data may be collected. Student performance data are often closely related to the objectives of the proposed intervention. Contextual information may not be so obviously related to the objective of the action plan, but provides useful background information on conditions that might support or hinder implementation of the plan.

Examples of student performance data include:

- number of students who are rated as proficient readers by their teachers (group interviews)
- current reading habits of students (taken from preliminary survey)
- number of classrooms in which teachers read aloud to students once each day (tabulated from observation checklists)

Examples of contextual information include:

- annual school goals and objectives (taken from school records)
- number of teachers attending reading workshops in the past five years (from school records)
- attitudes of teachers toward reading aloud in classrooms (from preliminary survey of staff)

The baseline information helps the action researcher to track progress during implementation. By noting differences, or variances, between baseline information and data collected during implementation, the action researcher can make adjustments needed to keep the project on target.

Writing Open-Ended Questions

In this strategy, the action researcher generates lists of questions that could be answered in several different ways by the data collected and still be valid given the context.

Some key words to use in writing open-ended questions are the words "how", "what", and "why".

"How can students learn to . . . "

"What could we do to increase the . . ."

"Why might students be . . ."

Research Questions Teachers Ask

Teacher questions are often clustered in the following areas:

- Student motivation, interest, and attitude toward school
- Home-school and community links
- Reading/Learning from Text/Literacy
- Assessment of student performance
- Using technologies to promote learning
- Working effectively with diversity: Linguistic, Racial, Cultural
- Instructional strategies

Source: Baumann J. F., Allen, J., & Shockley, B. *Research Questions Teachers Ask: A Report of the National Reading Research Center School Research Consortium*
http://curry.edschool.virginia.edu/go/clic/nrrc/ques_r30.html

Other, specific examples of questions raised by teachers and explored through action research include:

How can I help my students learn to read?

How does team teaching help or hinder student learning?

What sort of activities work best with slower learners?

What stereotypes do our textbooks present?

How can we predict which students might have trouble learning _____ (identify subject matter

How can a principal improve faculty morale?

How do parents feel about _____ (identify proposed change or current issue)?

Source: *Session 4 Topic: Qualitative Research Designs.*
http://www.cedu.niu.edu/~sorensen/502/qtc/session4.htm

The titles of action research reports suggest questions that are at the heart of classroom inquiry. Examples include:

The Role of Discussion in Developing Strategies for Aesthetic Reading

The Effects of Developing Individual Family History Art Books on the Self-Esteem, Cultural Pride, Motivation, and Writing Achievement of Fourth and Fifth Grade African-American Students.

Developing and Extending Literate Dialogues

The Impact of Using Writing Buddies on Second and Fifth Grade Writers and Readers

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Source: Baumann, J. F., Allen, J., & Shockley, B. *Research Questions Teachers Ask: A Report from the National Reading Research Center School Research Consortium*
http://curry.edschool.virginia.edu/go/clic/nrrc/ques_r30.html

Visioning

Choose one of the following tasks to help you describe and "picture" what you would like your classroom, your school, or your school district to become as a result of the action research that you and your colleagues are conducting.

1. **A Day in the Life . . .**
   Directions: Prepare an hour-by-hour description of the tasks and experiences of Chris, a high school teacher on a typical day in 2005. Describe Chris's students, meetings, itinerary. Describe those special circumstances of the day that best exemplify the way you see the new year-round school schedule operate.

2. **Picture This . . .**
   Directions: Draw a picture that depicts the special features of the your school, particularly focusing on its work with its students, the classroom, and parents. Use symbols, colors, and shapes to create an illustration of how teachers and students are grouped to create personalized learning.

3. **The School Report Card Presentation to the Community**
   Directions: Prepare the principal's annual address to the faculty and student body as you hope it will be five years from now. Highlight your school's accomplishments during the past five years by completing the following details of the speech.

   "We have explored . . . achieved . . . avoided . . . sustained . . . enabled others to . . . "

4. **Values and Beliefs**
   Directions: Describe what you believe should be your school's core beliefs about learning, learners, and schools as learning places. What values should the new school emphasize in its services and relationships with its students? What beliefs should teachers and administrators advocate about the way adults can work together for their students?

5. **Analogies**
   Directions: Using a variety of analogies, describe the future school. For example, if our school were a car, what kind of car would it be? If our teaching team were an animal, describe it. What about an appliance? A plant? A boat? Use analogies to creatively describe the future classroom, particularly as it relates to its primary clients.

6. **A Personal Vision Statement**
   Directions: A personal vision statement portrays what you want the organization to stand for; what the primary mission of the school is; what basic, core values you represent; a sense of how all the parts fit together; and, above all, how the vision maker fits into the grand plan.

   1. When I leave this school I would like to be remembered for . . .
   2. I want my school to become a place where . . .
   3. The kind of school I would like my own children to attend would . . .
   4. The kind of school I would like to teach in would . . .
   5. In order to accomplish this, we need to . . .

Conducting a Review of the Literature

Although action research grows out of a teacher's "need to know" and natural inquiry into the conditions of teaching and learning within the classroom, an important professional responsibility is to keep up with theories and development. A review of the literature can help shape your research question, and an action research report can help shape the knowledge base other teachers consult. Reviewing the available literature can be an important step in guiding and framing your action research study because:

- Someone else has studied your research question, and has identified problems that you need to think about before you can continue.
- It may suggest resources, strategies, or identify alternative solutions you hadn't considered, thus providing a broader context for your research question.
- It may help you determine if the problem is significant, and worthy of the investment of time and energy to explore it further.
- You gain access to researchers and practitioners who are influencing the thinking about related topics affecting your question, and the insights and recommendations that they may have.
- It provides multiple points of view, allowing you to consider the question from a number of different perspectives.
- Your work can build on the contributions of others who may have already considered/answered your research question.
- You may find suggestions for planning, formatting, reporting, or summarizing your action research question and report.

How to Do a Review of the Literature

A review of the literature related to the focus of an action research study summarizes, interprets, and evaluates the existing knowledge base (published materials) on a particular practice, issue, policy, or topic under study.

Some action research programs require a review of the literature and others do not. Generally, a review of the literature is based on reading several articles or chapter-length sources on the action research question. The number is less important than identification of issues and a thorough discussion of them. Readers should learn not only what has been written about the issue, but what interpretations and implications the action researcher is making based on the writings.

Components of a written review of the literature include:

- definition of the topic and important subtopics
- identification of key words or terms related to the topic or issue under study
- description of search procedures used
- categories of findings or divergent points of view detected by the reviewer
- acknowledgment or analysis of relevant research studies and findings
- generalizations, conclusions, and implications for classroom practice as determined by the action researcher

Steps in preparing a written review of the literature:

1. **Define the topic and the scope of review.** Place limits on the number of subtopics, the date range for information sources, or the number of each type of information sources to be used (books, journal articles, Web sites, etc.). Other examples of limitations might include: six journal articles, three of which are peer refereed; less than five years old; written in English; include one primary source, etc.

2. **Begin with a general text** that defines the topic and read more specialized and detailed texts next.

3. **Locate appropriate databases and refine your search strategy** using key words in different combinations (for example, a "review of the literature" is different from a "literature review" and will yield different results from an electronic search engine. Savvy searchers develop lists of synonyms and alternative terms.

4. **Take notes or highlight** everything you read for easy retrieval later.

5. **Cultivate your own networks:** ask librarians, colleagues, electronic discussion lists for sources of information relevant to your search.

6. **Develop a working outline** for your review that incorporates the natural clusters of information you have identified in your search. Generally, these include (a) an introduction or overview, (b) subtopic, (c) subtopic, (d) subtopic, (e) critical analysis, and (f) conclusion.

7. **Begin synthesis of the major ideas** by following your outline. This may result in going back to locate additional information.

8. **Check your own information seeking** as you proceed with synthesis. Has the search been wide enough? Is the material relevant? Is there good balance and representation in the sources?

9. **Test your analysis.** Are you assessing what you read, or are you just listing and summarizing items? Are you acknowledging strengths and weaknesses in the ideas or methods you have located? Are you making comparisons between the approaches that have been described? Your critical appraisal is the most important part of the review of the literature in an action research context.

10. **Describe how your review of the literature has shaped your thinking** about your action plan or intervention. Conclude with how your review of the literature has influenced your thinking about the topic and the question you have raised as part of your school or classroom inquiry. Has it validated your original thinking, expanded it, or challenged it?

One more time: Did your review of the literature define the "what" of a particular approach, i.e., using literature circles to develop literary appreciation? Did your review of the literature describe "how" the practice might be introduced, structured, monitored, and evaluated in classrooms? Did the review include "who" the particular practice was used with, and with what success? Did the review provide a statement about what significant findings resulted? Did your review conclude with your own critical appraisal of the method and its implication for your classroom action research?

On-line Help with Your Review of the Literature

Academic Writing: Reviews of Literature
(1997). *The University of Wisconsin-Madison Writing Center outlines what to do in the introduction, the body, and the conclusion of a review of the literature.*

http://www.wisc.edu/writing/Handbook/ReviewofLiterature.html

Preparing and Conducting a Literature Search
(1998). Draper, M. The University of Adelaide Library.
A guide to conducting a search, and sources to consult in preparing a review of the literature.

http://library.adelaide.edu.au/guide/med/paed/sem98.html

Review of the Literature
The context is nursing, but the objectives are universal.

http://www.uab.edu/son/lrobj.htm

Step 2: Developing a Plan of Action, an Action Research Proposal

Identifying a question for your action research study was the first step in a cyclic process of taking action, taking stock, and taking new action based on reflection on the data you have collected. The second step is to identify a concrete action or set of related actions that you will implement in your school or classroom. In thinking about your plan of action, there are several questions you can ask while drafting your action research proposal (see Figure 6, An Action Research Proposal).

The terms "action research plan," "action research proposal," and "research design" are often used interchangeably in the literature. Here, we mean an outline of the steps to be taken in implementing a new practice, a change in policies or procedures, or an intervention thought to improve the quality of relationships. A plan of action specifies who will do what, with whom, and when. It specifies the key components of an overall strategy and places them on a time line or schedule. A plan of action describes the resources, conditions, and supports that will be needed to bring about the desired results. The action steps that evolve from framing the inquiry become the basis for data collection, and collected data become the basis for reflection, understanding, and decision making.

> *Example:* A middle school teacher was curious about the reading habits of students in her class and how she could use that knowledge in influencing her teaching decisions. The questions that she raised about adolescent reading led her to create an action plan for designing, administering, compiling, and analyzing a student survey. The survey provided information on student reading habits, attitudes toward reading, preferred reading activities, and teaching practices that encouraged effective reading. The data from the survey led to reflection, introspection, and conclusions about quality and quantity of student reading.

How Do I Get Started on an Action Research Project?

The place to start is where you are now. What are you feeling about your role? Your students? What do you think is most important for your students to know and be able to do in order to become capable, confident learners? What do you know for sure about your school or classroom and what more would you like to find out? However you state your research question, it should be

- an issue about teaching or learning,
- something you can direct or influence, and
- a topic or concern you care deeply about

Once you have identified your research question, you can continue with the process of developing an action research proposal.

Question:	What am I trying to find out?
Rationale:	Why is this important?
Work Plan:	What am I going to try?
Time Line:	When am I going to do this?
References:	Who and what can help me think this through?
Data Sources:	What information will I collect?
Documentation/ Evaluation:	How will I know if I have succeeded?
Reflection:	What might I ask myself when my work plan is completed?

Figure 5: Components of an Action Research Proposal

Consideration in Developing an Action Research Proposal

1. Can I state or define my area of inquiry clearly and concisely?
2. Why is that important to me?
3. Of what significance are my questions to my students and their parents?
4. What resources will I employ or use in my area of inquiry?

5. What references will I consult or use in my area of inquiry?

6. What specific steps, procedures, or processes will I follow, and how much time will they take?

The first three questions help to assure the clarity and significance of inquiry. The next three questions help to assure that the proposed actions are carefully thought through. A plan of action lets the action researcher proceed more deliberately. A written plan of action or research proposal can also help to avoid procrastination or a choice of too many strategies. The action research proposal is a reality check as well as a quality improvement tool.

Action Plans in the Action Research Process

Once a question has been "framed" for inquiry, an action researcher sometimes pauses to consider what might be appropriate in organizing and sequencing the steps in an action plan. Here are some examples of inquiries and action steps to pursue the central question.

Example 1. Paula Renzoni, third grade teacher at the Flagg Street School in Worcester, Massachusetts asked "What is the effect of student achievement when staff engage in collegial practice that focuses on the integration of knowledge from the Massachusetts Curriculum frameworks, instructional practices, and assessment?"

Her action plan included the following steps.

1. Staff study the Massachusetts curriculum frameworks with a specific focus on the Worcester Public Schools Language Arts Curriculum.
2. Staff create a schoolwide writing rubric to assess student writing samples.
3. Staff design and examine a grade level Language Arts portfolio linked to the Worcester Public Schools curriculum
4. Staff participate in a peer coaching program, including implementation of "peer rounds" as a vehicle for collegial examination of instructional methods in a work setting.

Example 2. Amika Kemmler Ernst set out to document the Boston Public Schools' Teacher Inquiry Group Program. Her central question included these related items:

"What was the value for individual teachers in doing this work?"
"What was the experience of the group convenors?"
"What worked well for groups?"
"What challenges did groups face?"

Her action plan for collecting the data necessary to make interpretations, generalizations, and recommendations included the following steps:

1. Designing and collecting a group convenor report form
2. Designing and collecting a collaborative group report with both open-ended and short-answer items
3. Collecting anonymous reflections from individual participants at an end-of-year meeting.
4. Distributing guidelines for providing feedback.

Example 3. Paula Melhorn, Tong Lee, Doris Leger and Kathy Coulson met every Friday after school to discuss articles, make plans, and meet with administrators in the Fitchburg, Massachusetts Public Schools. Their action research study of the Hmong learner population was supported by their building principals, director of bilingual education, and the Superintendent of Schools.

Their central questions were related to issues of equity for minority students, and included:

"What percentage of the Hmong student population is retained in grade?"
"What percentage of the Hmong student population drops out of school?"
"What percentage of the Hmong student population seeks admission to college?"
"What cultural conflict issues exist among Hmong students and their teachers?"
"What support structures and services are most needed by Hmong students? "

Their action plan included:
1. Designing surveys
2. Collecting archival data (school records)
3. Conducting interviews with parents, students, teachers, and administrators
4. Organizing, displaying, and interpreting the data
5. Presenting findings to the district administrative team

These examples show that in action research, action plans exhibit some common characteristics:

- The action plan links directly to elements present in the central question
- The action plan employs multiple actions, dimensions or components
- The action plan reflects ongoing collection and analysis of information in the work setting
- The action plan incorporates ongoing reflection and dialogue about practice.

See additional Action Research Proposal in Appendix A.

Step 3: Collecting and Analyzing Data

Most action researchers use multiple measures to compare findings or to verify results. Below are some thoughts about data collection and some questions to consider in your action research project.

1. What do we want to know?
2. What data will we collect?
3. From whom will we collect data?
4. How will we collect data?
5. When will we collect data?
6. How will we organize and summarize the data?

7. How will we use the data?

By using at least three sources of data, you can compare the results of each and check to see if similar patterns or issues emerge. This technique of "triangulation," or using multiple sources of data, can compensate for imperfections, increase confidence in results, and raise important questions for follow up. It also allows you to confirm, revise, or reject your planned intervention.

Research Question	Data Source 1	Data Source 2	Data Source 3
Can students assess their own learning?	**Parent Survey**	**Student Interview**	**Teachers Journal**
Can students with disabilities be served in regular classrooms?	**Research Reports**	**Teacher Interview**	**Classroom Observation**
Can student-led conferences build responsibility and achievement?	**Portfolio**	**Teacher Observation**	**Parent Survey**

Figure 6: Sample Data Collection Plan

Triangulation of Data Sources

- **Compensates for imperfections**
- **Increases confidence in results**
- **Raises important follow-up questions**

Selected Data Sources

Action researchers draw from a wide variety of data sources, as illustrated in the chart below.

- Archival Records
  - ◊ Tests
  - ◊ Attendance
  - ◊ Cumulative folders
  - ◊ Report cards
  - ◊ Disciplinary
- Student Products & Performances
  - ◊ Journals
  - ◊ Projects
  - ◊ Demonstrations
  - ◊ Works in progress
  - ◊ Learning logs
  - ◊ Enactments
  - ◊ Final drafts
- Classroom Observations
  - ◊ Research journals
  - ◊ Anecdotal records
  - ◊ Classroom maps
  - ◊ Shadowing
  - ◊ Checklists
  - ◊ Sociogram
  - ◊ Diaries, logs
  - ◊ Photographs
  - ◊ Videos
  - ◊ Audiotape
  - ◊ Rating scales
- Events
  - ◊ Written surveys
  - ◊ Focus groups
  - ◊ Reader/writer response forms
  - ◊ Interviews
  - ◊ Self-assessment

Figure 7: Sources of Data

Data Collection Strategies Frequently Used in Action Research

Anecdotal records — Notes kept by a classroom teacher that provide a "snapshot" of what is happening in the classroom or school. These may be more useful if written about selected individuals.

Archival data — The records kept by the school, from which the action researcher can determine attendance rates, retention rates, disciplinary referrals, dropout rate, suspension rate, graduation rate, enrollment in upper level courses, grade distribution, and number of students targeted for special programs or services.

Audiotapes and videotapes — Both tape recorders and video cameras can accurately capture student language, behavior, and activities while the teacher is managing other routines. Transcription can be time-consuming if the complete session is transcribed. Revealing pieces of dialog may be enough to serve the purpose.

Document review — Detecting trends, patterns, or relationships in printed materials related to the focus of inquiry. Documents might include policies, rules and regulations, local curricular guides, lesson plans, accreditation reports, etc. Policy and

	practice may not be aligned, so comparing documents to behaviors could be a useful task.
Focused discussion	A group assembled by the action researcher that meets to discuss their understanding of a particular problem or situation in schools or classrooms.
Interview	Meeting between the action researcher and one or more people that attempts to discover the facts and feelings related to a particular issue, situation, or problem. Best when limited to 4 to 6 pre-determined questions (protocol) and follow-up probes based on subject responses.
Journal	A written, personal reflection containing key responses or reactions to the area under study. Journals can provide a record of changes in individual students, teaching strategies, use of time, and teacher attitudes or beliefs.
Observation checklist	Data collection tool that allows for quick assessment of whether specific, observable behaviors or other items are present or not (all groups on task, groups practicing turn-taking, group members following roles, etc.).
Photographs	Both digital and film-based images are easy to incorporate into action research reports. In follow-up conversations with subjects, photographs can be used as a "reminder" of what was happening at that particular moment in time.
Portfolio	A systematic collection of materials about some aspect of teaching or learning. A portfolio may contain student work, teacher-developed products, meeting minutes, agendas, or school communications.
Questionnaire	A written form or list of questions distributed to subjects in an action research study. The replies are analyzed for usable information. Generally easy to write, to administer, and to tabulate, but getting a high rate of return can be difficult, and interpretation of language can skew results.
Reader/writer response forms	Open-ended questions that serve as prompts for reflection on a teacher-provided topic or theme.
Shadowing	Following selected students or teachers for a specified period of time to collect a picture of the typical day in their life.
Socio gram	Chart of class relationships derived from interviews with each member of the class. Useful in determining patterns and types of interactions between students.

Analyzing and Interpreting Data

Calhoun (1994) suggests some frequently used data analysis questions.

1. What important points do these data reveal?
2. What patterns or trends show up? How might they be explained?
3. How do data from various sources—test scores, grades, surveys, interviews, observations, and documents compare?
4. What correlations (relationships among data) are important?
5. Are there results that are different from what you expected?
6. What actions are indicated?

Other Techniques

Other techniques used to assist in the analysis of data collected through action research include:

1. Sequencing data in chronological order to detect patterns over time.
2. Creating an index to topics or key words identified in a collection of student work or teachers' journals.
3. Coding subject responses by topic, type of statement, or other category in order to establish amount and kind of interaction or thought.
4. Writing a research memo—notes the action researcher makes about theories and relationships as they strike the analyst while looking over raw data sources.
5. Constant comparison. In this method (Glasser & Strauss 1973) the action researcher first analyzes data in terms of categories and concepts that refer back to the original question. As more data are collected and analyzed, the categories may be modified or refined, and tested against the data coming in.

Step 4: Engaging in Reflection and Introspection

Action research not only teaches us about what works and doesn't work in schools and classrooms, but also lets us learn about the things we do, say, or believe that influence the quality of teaching and learning. This critical self-analysis can extend to the culture and operation of the organization in which our teaching practices reside. For this reason, action research can be a powerful tool for transformational change.

Encouraging Reflection

Cognitive reflection can be encouraged through use of reflective journals, analysis of videotapes, observation checklists, peer observation, and discussion of what students are learning.

Critical reflection can be promoted through use of "sticky situations," in addition to classroom vignettes, or case studies. In action research, the emphasis may be on how the

organization accepts or rejects innovations, or how one part of the system impedes or permits new practices.

Narrative reflection can be promoted through peer observation, study groups, on-line discussion lists, and action research projects that are informed by research, theoretical frameworks, or outside experts. A study of teachers' writing might require teachers to keep personal journals, respond to open-ended surveys, and/or participate in group reflective exercises.

Taking a Second Look

Kochendorfer (1994) argues that while you do not want to draw conclusions that your data will not adequately support, you should permit yourself to speculate. He offers the following prompts:

"I have little or no evidence for this, but I believe that . . . "

"This notion goes beyond the study, but I think that . . . "

"I have a hunch that if . . . "

"It just might be that . . . "

These hypothetical responses may help you see additional possibilities and directions for action research.

Three Reflective Questions for Classroom Research

1. What was happening in my teaching that was different from what I wanted to have happen?
   - What I thought and did.
   - What my students thought and did.
   - What I wanted to have happen.
   - What actually happened.
   - What I could change next or investigate further.
2. How has the quality of education improved for my students?
3. How has my own understanding of teaching changed?

Reflective Questions for Schoolwide Action Research

What's different in the daily experience of students and teachers?

What's different about teaching and learning?

What's different about the organization and operation of our school?

What connections are being built between school and community, school and institutions of higher education, or schools and business partners?

How do we know change has occurred? What evidence of impact exists?

More Strategies for Reflection

- How does the data collected in our project compare with findings from similar studies conducted in comparable settings?
- What alternative explanations or solutions may be suggested by the data?
- What organizing framework, theoretical basis, or underlying rationale is suggested by our collective data?
- From what different perspective or point of view could we interpret these data? (roles, goals, priorities?)
- What "what if?" scenarios might the findings prompt?
- What would be the worst thing that could happen if the findings are true? What would be the best thing that could happen if the findings are true?

Step 5: Documenting and Reporting Results

"Writing up your research" is not the final step in the action research cycle.

Your action research report may feature an abstract or executive summary—which is the only part some people will read. Other readers may be more interested in your methodology, or plan of action. Still others will want to read about the data you analyzed to make your claims. Some will want to know what you learned from your action research.

Developing the action research report involves:

1. Determining who the audience will be and anticipating what they will want to know.
2. Developing an outline or format and setting deadlines for writing individual sections.
3. Consulting several publications for ideas on format and style.
4. Learning about your preferred writing routines (circumstances in which you write best) or learning new ones.
5. Drafting and revising several versions of the same document.
6. Sharing your report with others and getting feedback.

Outline for an Action Research Report

I. Introduction (background)

The reader or listener places the action researcher in time and space. The reporter(s) briefly describe their community, their school, their students, or themselves. The action researcher identifies any precipitating events, conditions, or circumstances leading up to the action research study. The introduction states why a particular question was under investigation and provides a context for what is to follow.

II. Review of Literature

If the question, issue, problem, or theme is one that has been discussed in professional journals, books, or reports, the author(s) provides a concise review or summary. The object is to illustrate the sources that have stimulated or influenced the researcher's questions. The review of literature may also validate or explain the researcher's selection of a particular intervention or technique.

III. Methodology (procedures and processes)

The action researcher describes in detail the component parts of the selected strategy or intervention and outlines the steps taken to collect data on school or student performance. The methodology section identifies time lines, subjects, activities, instruments, or other implementation activities and data collection methods. The methodology section makes explicit what was being done differently. A "what, who, when, where, why, how, and how much/how many" organizer may make a concise reporting format. Be sure to include copies of survey, interview, interview, or focus group questions.

IV. Results (findings)

The results section includes overall generalizations and supporting tables of data or other statistical treatments of the information collected. The results may also itemize "learnings" in the form of advice to other practitioners applying a similar technique, strategy, or intervention.

V. Analysis (discussion)

The action researcher offers some additional interpretations of the findings or provides some insights into his or her own practice. The teacher researcher is "thinking out loud" in this section, deriving some implications for their own classroom practice.

VI. Conclusion (next steps, action plans)

The action researcher announces some concrete decisions based on the analysis of findings reported in the action research study. The reader or listener learns what the action researcher(s) believes (a) should be continued because the data shows that the intervention is working; (b) should be reworked or modified because results are insufficient or inconclusive; or (c) should be discontinued because the data shows that the intervention is not working.

VII. Reflections and Further Questions

Action research is an ongoing, iterative, and cyclic process. The search for answers to one set of questions usually reveals other, related sets of questions that deserve additional

action research. The teacher researcher identifies further questions for investigation in this final section of the action research report.

Sharing Your Knowledge and Disseminating Your Findings

The development of an action research report may be the "end" of the current action research project, but it is not the only time that an action researcher can or should share findings, feelings, and thoughts.

A general idea moves from a "vague sense of something not being quite right" to a fully formed question through discussing, proposing, exploring possibilities and opportunities, and identifying constraints.

The value of putting what you think down in writing, and of speaking what you are thinking out loud, is that you get clearer about what you are experiencing, and you open yourself up to new opportunities and new information. Many people look at what they have just written or listen to what they have just said and say, "I can improve on this," or "That's not what I meant at all."

Speaking and writing about our work lets us enter into deeper discussions, reflections, and understandings about who we are and what we do. Our articulations can lead to replanning, revising, and rethinking our own conceptualizations about learners, learning, and the role of the school as a place for organizing learning.

The action research report represents a culmination, too. It may serve as a short rest on a longer journey, but it is a moment of summing up, of sharing with others what you have learned on a personal quest.

Creating Our Own Symposium for Sharing

Some districts have structured opportunities for staff to share the results of action research projects. These are generally conducted on professional development days.

Sometimes, the symposium is conducted on a regional basis, sponsored by a college or university or regional service center. Teachers presenting the results of their action methods and research projects may be describing their findings and conclusions to teachers from different schools and districts.

Encouraging Sharing Inside Our Own Schools and District

At the school and district level, one practice is to devote one faculty meeting to the sharing of action research programs aimed at a major school change, a school goal, or a priority area. This practice seeks to institutionalize the norms of experimentation, data collection, and collegial sharing.

Presenting at Conferences

Statewide conferences are held annually by most professional organizations, and the planning committees of these organizations are generally delighted to sponsor a presentation of findings by a teacher researcher. Your state teachers' associations,

subject matter or grade level associations, state Association for Supervision and Curriculum Develop affiliates might want you to present individually or as a panel member contributing findings on a related issue.

Publishing in Journals

Many professional journals actively seek the stories that classroom researchers can share. Write to these publications to obtain guidelines for submitting your manuscript.

Teaching and Change is published four times annually by the NEA Professional Library and Corwin Press, Inc.

Associate Editor
Teaching and Change
NEA Professional Library
1201 16th Street NW
Room 717
Washington, DC 20036
202-822-7256

Educational Leadership is published monthly by the Association for Supervision and Curriculum Development.

Educational Leadership
ASCD
1250 North Pitt Street
Alexandria, VA 22314-1453
703-549-9110

Journal of Staff Development is published four times annually by the National Staff Development Council.

Editor
Journal of Staff Development
Kansas State University
17 Bluemont Hall
Manhattan, KS 66506-5301
913-532-6323

Posting Action Research Reports on the World Wide Web

In addition to conferences and publications, the arena of electronic communication is opening up for teacher researchers. There are several electronic discussion lists devoted to the advancement of action research in schools and classrooms, and Web sites to which you can send your action research reports for potential posting. Both discussion lists and Web sites let you expand your reach and tell your stories to educators who may share similar interests and concerns—all over the world. Below are listservs and Web sites that may be interested in posting your action research report.

AEL's Action Research Listserv
Refer to Chapter 1, Figure 5, for information on how to subscribe to the aelaction listserv.

Action Research International
A multidisciplinary journal invites submissions describing action research projects, with a particular emphasis on reflection. This URL links you to the guidelines for submitting action research papers.

http://www.scu.edu.au/schools/sawd/ari/ar.html

Networks: An On-line Journal for Teacher Research
Take a look at current issues or visit previous issues. Networks welcomes submissions on a wide variety of topics related to classroom research including: curriculum, teaching methodology, ethics, collaboration, and community.

http://www.oise.utoronto.ca/~ctd/networks

Chapter 4

Examples of Action Research

Chapter 4

Examples of Action Research

This chapter provides some examples of action research in education. Descriptions of many more action research projects can be found on-line. The chapter concludes with a list of other sources of action research summaries or full text reports.

An Example of Action Research

Below is an example of the first month of an educational action research project. Sue Convey's words have been paraphrased in order to give a practical illustration of some ideas and terms included in action research. Sue's comprehensive reports actually contain a much more detailed description of what happened, and of her ideas and reflections at each stage of the project.

PLAN

General idea

In 1985, I taught a primary grade at West Melbourne Primary School, a small inner-city school where most of the pupils are recently-arrived Chinese immigrants. Our classes were run very traditionally, with teachers making most decisions and controlling most of the movement, communication, timing, and choice of activities within the classrooms. I was concerned that neither children nor parents seemed really interested in the school and its curriculum. There were few "behavior problems," pupils did as they were told; but they demonstrated little enthusiasm, independence, or creativity.

Reconnaissance

I recorded in my journal just what was happening in the classroom. Many children sat waiting for instructions or individual assistance while I was busy helping others. The children showed little initiative in the classroom. They waited for direction in even simple tasks like cleaning up the room.

Describing the field of action

I was aware that Chinese parents and children had differing ideas about ideal teaching and learning styles, so I talked to them to find out their expectations. At this time, the staff developed a parent questionnaire, which provided useful information. Keeping a journal at this stage helped me to clarify my ideas about what was happening, how this differed from what I thought should happen, and situational factors leading to my pupils' dependence. I also wrote about the expectations of the school principal, the education department, and the other teachers.

It was obvious from our staffroom discussions that other staff members were also concerned about the level of initiative pupils, particularly the Chinese pupils, were demonstrating. We discussed the pros and cons of various types of classroom organization. We talked at length about what we were doing as teachers, and how we had learned these practices. We discussed among ourselves, and with the pupils, the activities that children enjoy most; and decided which of these could be incorporated easily into learning activities. We thought what was most needed was for children to become

more involved in the planning and implementation of their own education and to take more responsibility for organizing their own learning. We came up with a title for our project: "Towards Independence and Creativity."

Defining the first action step

After considering a variety of possible actions, we decided to give the children the freedom to develop one curricular area—language arts—in any way they wished. We discussed with them the need to develop research and organizational skills, and gave them some ideas about how they could help each other, rather than relying so heavily on teacher help. The children raised other ideas, and seemed keen to choose a theme and start choosing some activities.

Planning of monitoring

Each teacher was to keep a diary, to note the effects of the change, and any problems arising, and thoughts about future actions. We also chose individual methods of data collection, according to our particular interests.

Timetabling

We rearranged our timetables so groups of children would not be restricted to grade levels, and planned a starting date and provisional timetable. We decided to check on progress at a staff meeting after two weeks, although experiences could be shared in the meantime at lunchtimes.

ACT

The children were put into groups, and set to work developing the theme. Each teacher talked with his/her group about staff expectations—that the group was to produce, within a set time, a display about the theme that included specific content, such as written work and art work. Parents and other groups would be invited to view the display. A few children set to work, organizing activities confidently, while others waited in vain for teacher direction. The teachers recorded incidents of frustration and confusion as well as progress towards independence. Teachers also found that they varied in their ability to "let go of the reins," and wrote about the difficulty of changing habits and traditional modes of control.

OBSERVE

We occasionally photographed groups at work, and each teacher used a data collection sheet. I kept time-on-task sheets for three children I had been particularly concerned about, and wrote down comments children made to me and to each other about the project. I was able to do this for only a short period of each language arts lesson. Each night I wrote about at least one way in which my teaching had changed, and any problems or successes I had experienced. Two problems arose consistently—timetabling meant that children's activities were either interrupted or we were filling in time waiting for other groups to finish, and there was difficulty in my getting around to help all the children who could not yet write in English.

REFLECT

After our planned staff meeting, we talked about where we had been successful and areas that need further improvement. We discussed some unanticipated effects and the constraints we had encountered. One point that arose was how our normal teaching practices had actually fostered the children's dependence. Each of us had listed in our journals many points needing clarification and

incidents worth sharing, so the meeting was long and fruitful. We decided our most important common problem was that emphasis on writing in English had handicapped some of the newer and younger children, and limited the amount of assistance children could give each other.

Revised plan

By the end of the meeting, we had chosen our next action step—to continue with the thematic groupwork approach, with increased emphasis on exploiting the bilingual talents of the children and their parents. We decided to arrange groups to provide a spread of language ability, and to allow Chinese, English, or bilingual writing. One of the teachers who had been reading a journal article about bilingual teaching shared it with us, and I was able to tell the others much more about action research after doing some of the course reading. We also adapted our monitoring sheets and set a date for our next official meeting.

That was the end of Sue's first action research cycle, but many more followed. Throughout the year, questionnaires, teachers' journals, and other monitoring showed that the children's progress toward independence and creativity continued. Now children work in self-chosen, flexible groups within an integrated curriculum. Parents, children, and teachers negotiate curricular decisions, and parents and community members assist with teaching duties. Children are often involved in peer tutoring, and they present regular community displays of their work. Chinese language, traditions, and crafts are taught and valued by children and teachers. Standards of work are high, and children demonstrate enthusiasm and enjoyment at school. The staff are presently thinking about ways of involving Chinese parents in School Council meetings. They've realized that the traditional organization of formal meetings discourages attendance and participation. Sue is planning to publish reports of their continuing action research next year.

Can you find in Sue's project examples of

- identification of an educational practice which needs change
- collaborative decision making
- understanding a practice through changing it
- negotiated curriculum
- involving those affected by the action
- one small, manageable change made in each cycle
- a spiraling of cycles; the second arising from understandings gained in the first
- the problematic nature of research
- the socially critical nature of the research
- theory informing practice

- practice informing theory
- collection of evidence of the effects of change
- growth of understanding of educational practice
- growth of understanding of the context of educational practice

Adapted from: *Action Research in Curriculum: Course Guide*. Deakin University, Geelong, Victoria, Australia: 1986.

The following examples of action research have been provided to give the reader glimpses into the process and products of action research.

What Types of Questions Do I Ask During Science Instruction?
Denise Hughes
Caldwell Elementary School
Hammond, IN

Denise Hughes explored the types of questions she asks during various stages of a science unit. Her action plan involved coding questions according to a pre-determined category (divergent, convergent, refocusing, and procedural). During data collection and analysis, Denise used tally sheets while interviewing individual students and listening to audiotapes of her questions during class discussions. In engaging in reflection and introspection, Denise noticed that the number of divergent and convergent questions increased as the experiments progressed. Denise plans to use her collected data as baseline information for a follow-up investigation into gender bias in questioning. The format and organization of Denise's action research report may serve as a useful model for some readers.

Writing Response Groups: Real Benefits or Just a Good Time?
Elizabeth L. Tipaldi
Thornton Burgess Middle School
Hampden, MA 01036
http://www-unix.oit.umass.edu/~cmoran/wmwp/bonniet.htm

Elizabeth L. Tipaldi describes how she came to select her question about writing response groups in her middle school classroom. Elizabeth reviewed the literature on the subject and consulted experts in considering her options. We learn that her plan of action changed in response to what she was learning about and from her students. About halfway through her research she determined to collect data concerning peer responses to three different genres of writing so she could compare whether students perceived peer response groups as more useful in one genre than another. Elizabeth collected and analyzed data from several sources, using oral feedback, expository essays, and a written student survey. Throughout her narrative, Elizabeth engaged in reflection and introspection, asking herself questions about the implications and consequences of her action "Would students perceive peer response groups as benefiting their writing when compared to directed teacher lessons?" In reporting the results, Elizabeth concludes that the benefits of writing response groups do not necessarily affect the one piece of writing

reviewed but rather have a cumulative effect over time. Her action research summary, complete with a list of selected references, is an excellent example of reflection on action.

Action Research: Senior Project
Annette Collins
Oskaloosa High School
Oskalosa, KS 66066
http://nekesc.org/~rmiller/Action%20Research.html

Annette Collins discusses how she first became interested in the concept of a Senior Project to develop student responsibility for learning. Her plan of action included piloting a Senior Project program at her high school. Specifically, Annette wanted to know how high school seniors value participation in the program, to identify reasons for resisting or rejecting the practice, and how her own instruction could be improved to better prepare students for participating in the project. As part of her data collection and analysis, Annette and her students kept daily journals. She also used a student survey and made observational notes at a student assembly in which seniors gave advice to next year's participants. Survey data is presented in list form in her action research report. Annette shares her own insights and reflections in her report, particularly about what she learned about herself as a teacher. "I have learned from these entries how uncomfortable I feel when I do not have complete control of the learning environment. But this is at the very heart of the issue. I must let go and allow my students more freedom to choose, to plan. And to accept the responsibility which accompanies that freedom."

Additional Action Research Examples

Reading and the Aliterate Student
Caryl A. Finn
Hampshire Regional High School
Westhampton, MA
http://www-unix.oit.umass.edu/~cmoran/wmwp/caryl.htm

Reflecting on the Reflections: A Teacher Looks at Portfolio Writing
Bonnie R. Moriarty
Cathedral High School
Springfield, MA
http://www-unix.oit.umass.edu/~cmoran/wmwp/bonnie.htm

Senior Interviews as a Method of Helping Students Develop Post-Secondary Plans
Peggy A. Craig
Oskaloosa High School
Oskaloosa, KS
http://nekesc.org/kids/kft/4.html

Written Language Deficits and Written Outcomes in Language Arts
Marty Strait
Perry Middle School
Lawrence, KS
http://nekesc.org/kids/kft/15.html

Chapter 5

Frequently Asked Questions About Action Research

Chapter 5

Frequently Asked Questions About Action Research

Eleven of the most frequently asked questions about action research and brief responses are presented here. This chapter has been included to provide the beginning action researcher with a sense of the larger context surrounding the use of action research as a tool for individual and professional growth.

1. **What is action research?**

   Stephen Kemmis has been a leader in identifying the purposes and components of action research in school settings. He defines action research as a ". . . systematic process of learning by doing—carefully observing the character and consequences of what one does with the tripartate aim of improving one's own practices, improving one's understanding of those practices, and improving the situation in which these practices are carried out." (Kemmis, 1986)

   Action research is intended to achieve both action (doing) and research (systematically collecting data). "It is suited to situations where you wish to bring about action in the form of change, and at the same time develop an understanding which is in addition to what is known." (Dick and Swepson, 1994)

2. **Why is action research regarded as an important part of professional practice?**

   The focus for action research comes from individual classroom teachers. This recognizes and validates the voice of the practitioner in identifying practices that work, investigating issues of concern, or raising questions that are most relevant to their school setting or classrooms.

3. **Who conducts action research?**

   Action research is conducted by classroom teachers who raise questions about their individual or collective practices and conduct a systematic study of their own teaching. Action research has a long tradition in parts of Great Britain and Australia. There has been a growing interest in Canada and the United States.

4. **How is action research carried out?**

   An action research process is cyclical, iterative, and continuous. The teacher focuses on some aspect of what is already going on in the school or classroom, and develops a **plan** for improving results. The teacher **acts** on the plan, and at the same time **observes** the effects of the action in the context or setting. The teacher reflects on the data collected during the observation phase to determine what further questions or choices of actions might have surfaced. The successive implementation of action research cycles is part of the discipline needed to engage in systematic classroom inquiry.

5. **What kinds of questions does action research investigate?**

Action research investigates questions teachers have about school or classroom practices. The area of focus does not have to be a "problem" that the teacher or school is experiencing, but may be something that the teacher is trying to improve, or has heard might be useful. Below are some action research questions. (Baumann, Allen, and Shockley 1994)

- **Motivation, Interest, and Attitudes**
  "How is whole-group reading affecting students' attitudes toward reading?" (elementary teacher)
  "How can a textbook be written to be more engaging? Is there a way to get kids engaged positively" (high school history teacher)
  "How can I use popular literature to develop a window to science content?" (secondary science teacher)
  "How is the 'Reading Lunch' program working?" (elementary media specialist)

- **Home-School-Community Links**
  "How do we get parents interested in promoting their kids' literacy?" (elementary teacher)
  "How can we promote literacy in homes, for example, with teenage mothers?" (ninth-grade English teacher)
  "What if there is no one at home with whom the child can read? What if the mother can't read? What can we do?" (elementary teacher)

- **Content Reading/Learning from Text/Functional Literacy**
  "I'd like to know more about teaching reading and writing through content subjects." (upper elementary teacher)
  "In vocational programs, kids need help in reading charts, diagrams, tables, and so forth. How can I help them do so?" (high school vocational teacher)

- **Assessment**
  "Self-evaluation—how can kids evaluate themselves?" (kindergarten teacher)
  "We need to look at alternative forms of assessment." (elementary teacher)

- **Technology**
  "How about using technologies to promote literacy and reading?" (secondary media specialist)
  "What about TV? Could discussions be created around TV programs?" (Chapter 1 teacher)

- **Diversity: Linguistic, Racial, Cultural**
  "Communication levels among students with different backgrounds and races—how can we promote broader tolerance and understanding? (secondary teacher)
  "How do we help an ESL child who is neither fluent in English nor his first language?" (elementary teacher)

- **Instructional Strategies and Interventions**
  "Are we hurting kids by encouraging them to use invented spellings when they reach my grade level?" (third grade teacher)
  "I'd like to explore the impact that the use of wordless picture books has on kids' oral language development?" (primary grade teacher)
  "What effect has peer tutoring had, for example, on reading buddies and cross-grade pairs?" (elementary teacher)

6. **How do I get started?**

Begin with listing your individual questions and concerns about school or classroom practices. Does in-school suspension reduce disciplinary problems? Can technology help my students become better problem solvers? The concerns or questions you pose should be something you care deeply about and can do something about. It can be helpful to discuss your ideas with other teachers as a way to focus your area of inquiry, and to let their ideas shape or reinforce your commitment to taking action.

Choosing a question to study is the first step in action research. "What do I want to find out?" comes first, followed by "What will I try out in my school or classroom?" The third question, "How will I know if it made any difference?" requires that you make some systematic observations and evidence collection. Finally, you will ask yourself "Did it bring about an improvement or necessary change?" Prepare a written report of your question, your action, your evidence, and your own interpretation of the data you collected.

7. **Is a review of the literature necessary in conducting action research?**

Reviewing the literature can

- help refine or re-formulate the initial research question
- validate or challenge the selected action or intervention to be studied
- screen for assumptions or bias
- suggest additional questions or directions for further action research
- contribute to general understanding of what works and why
- build confidence in the action research process and the action researchers

8. **Can action research "go wrong"?**

There are many reasons why an action research project could fail to produce the results it was expected to achieve. Here are some of them:

a. The teacher asks a question that he/she doesn't really want an answer to or which isn't really important to him/her. Being "honest" and "open" are dispositions that are important in action research.

b. The teacher's conclusions are based on a limited amount or kinds of information collected. We advise triangulation of three different data sources where possible.

c. The teacher participates in a collaborative action research project, but the members of the group lack the skills of cooperation, communication, or consensus-reaching needed to make it work.

d. The teacher launches an action research plan before really studying the situation or consulting the literature. The "question" is framed too quickly, or the

"problem" is formulated prematurely, and the teacher proceeds through the remaining stages of the action research cycle.

e. The plan contains too many variables or "interventions" to make reliable claims about impact or effectiveness. The focus area may be stated as a question or a problem, but should be within the researcher's decision arena or area of control. The questions may change as the research progresses.

f. The teacher selects a feedback strategy or data collection system that is not compatible with his/her methods of teaching, the classroom environment, or the action research question.

g. The teacher limits reflection to deciding if the intervention "worked" or not, and does not try to understand what happened or why it happened the way it did. The teacher may not probe deeply enough into changes that may have occurred with herself or the school faculty as the result of her actions.

h. The action research project results in unforeseen negative consequences to students or interferes with learning.

9. **Is action research really research?**

Yes, because it employs a methodology which fits the situation being studied and the goals being pursued. Most of the time, the methods include qualitative rather than quantitative data as evidence.

Action research may be different from purely scientific research because it does not always seek or provide causal explanations of what is being studied. Action research may be different from experimental research in that it does not always attempt to answer precise questions with strictly quantitative findings. Action research, by definition, does not separate the research from the situation or subjects being studied.

10. **What is the relationship between teacher action research and teacher evaluation?**

Participation in action research is one of several "options" for experienced professional teachers in many districts. These options are alternatives to the standard administrator evaluation based on the district's standard(s) for professional competency. Participation in a goal setting process, independent study project, peer coaching (classroom observation) program, or serving as a mentor to a beginning teacher are other alternatives.

What distinguishes action research from the other alternatives is the discipline of the classroom inquiry? Participating teachers must, typically

- reflect on a common concern
- select a topic area based on the concern
- identify a specific issue of concern
- review the literature

- formulate a research question
- plan and identify assessment measures
- analyze and reflect on findings
- report outcomes
- implement the intervention

11. **What is the role of the principal in action research?**

Emily Calhoun (1994) contends that the principal makes schoolwide action research possible. She writes that the principal invites and supports shared governance and collective action. Without the principal as organizational and managerial facilitator, teachers find it difficult to pursue schoolwide inquiry. The principal can

- help ensure that the necessary conditions, resources, and supports are in place to enable action research to occur
- keep student learning prominent on the research agenda
- coach staff in collecting, organizing, interpreting, and sharing data
- engage in confrontation when necessary
- encourage quality professional development
- act as spokesperson for the schoolwide action research process
- provide opportunities for the results of action research to be shared and recommended changes to be enacted

Related References

Baumann, J. F., Allen, J. & Shockley, B. (1994). "Research questions teachers ask," National Reading Research Center School Research Consortium, University of Georgia, Athens, Georgia , Available at http://curry.edschol.virginia.edu/go/clic/nrrc/ques_r30.html

Calhoun, E. F. (1994). *How to use action research in the self-renewing school.* Alexandria, VA: Association for Supervision and Curriculum Development.

Dick, B., & Swepson, P. "Frequently asked questions about action research," Available at http://www.parnet.org/Tools/Tools_3.cfm

Carr, W., & Kemmis, S. (1986). *Becoming critical: Education knowledge, and action research.* Philadelphia, PA: Falmer Press.

Russell, T. (May 28, 1997). "An introductory guide for teacher candidates at Queen's University," Hamilton, Ontario, Canada. Available at http://educ.queensu.ca/projects/action research

Annotated References on Action Research

Anderson. G. L., Herr, K. & Nihlen, A. S. (1994). *Studying your own school: An educator's guide to qualitative practitioner research.* Thousand Oaks, CA: Corwin Press.

The authors describe theory and methods for conducting qualitative practitioner research. Their examples of action research and the chapter on qualitative research methods are excellent.

Berliner, D. & Casanova, U. (1996). *Putting research to work in your school.* Palatine, IL: IRI/Skylight.

A useful reference for reviewing the literature on the many strategies likely to be the focus of inquiry in classroom action situations.

Bernhardt, V. L. (1994). *The school portfolio: A comprehensive framework for school improvement.* Princeton Junction, NJ: Eye on Education.

Practical components for analysis for school-wide action research. Bernhardt provides a comprehensive framework and illustrates how to measure performance.

Calhoun, E. F. (1994). *How to use action research in the self-renewing school.* Alexandria, VA: Association for Supervision and Curriculum Development.

A popular and widely used guide for conducting schoolwide action research.

Glasser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine Publishing.

Grounded theory includes using qualitative analysis on secondary quantitative data. The authors emphasize the need to go to the field to make discoveries as well as the need to formulate actions that are grounded in data.

Holcomb, E. L. (1999). *Getting excited about data: How to combine people, passion, and proof.* Thousand Oaks, CA: Corwin Press.

This book outlines processes for producing concrete evidence and practical applications of graphs and statistics in school-based inquiry.

Holly, M. L. (1989). *Writing to grow: Keeping a personal-professional journal.* Portsmouth, NH: Heinemann.

Clear, concise directions and practical tips for keeping a personal and professional journal. The premise of this book is that teachers are by nature inquirers, and that observation, self-analysis, and self-direction can build the voice and confidence needed to study themselves, their colleagues, and their profession. Illustrated with logs, journals, diaries and types of writing.

Hubbard, R. S & Power, B. M. (1993). *The art of classroom inquiry: A handbook for teacher-researchers.* Portsmouth, NH: Heinemann.

An outstanding set of data collection and analysis strategies, particularly in the elementary school and early childhood level. The authors illustrate how to collect evidence from student learning products.

Kemmis, S., & McTaggart, R. (Eds.). (1987). *The action research planner*. Geelong, Victoria, Australia: Deakin University Press.

Kemmis and McTaggart outline their self-reflective cycle: Plan, act, observe, reflect, etc. Their main research method is helping teachers make critical observations of their own practice.

Kochendorfer, L. (1994). *Becoming a reflective teacher*. Washington, DC: National Education Association.

An extensive collection of tools and techniques for reflection and self-assessment.

Noffke, S. E., & Stevenson, R. B. (1995). *Educational action research: Becoming practically critical*. New York, NY: Teachers College Press.

Presents case studies of action research in diverse settings and emphasizes the larger value of action research to the total system in which it operates.

Quigley, B. A., & Kuhne, G. W. (1997). *Creating practical knowledge through action research: Posing problems, solving problems, and improving daily practice*. San Francisco, CA: Jossey-Bass.

The authors outline a systematic discovery process to help adult education practitioners understand, analyze, interpret, and resolve day-to-day problems in the educational workplace.

Sagor, R. (1992). *How to conduct collaborative action research*. Alexandria, VA: Association for Supervision and Curriculum Development.

A strong—and concise—description of steps in the action research process.

Schon, D. A. (1983). *The reflective practitioner*. New York, NY: Basic Books.

Schon wrote about reflection on action and reflection in action. His treatment of personal and group reflection about past, present, and future events are foundations of action research.

Schmuck, R. A. (1997). *Practical action research for change*. Arlington Heights, IL: IRI/Skylight.

The steps of school or classroom inquiry, in workbook style format. Schmuck presents both proactive and responsive action inquiry models.

Seidman, I. E. (1991). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.

A guide to in-depth interviewing as a research approach. The author describes how to structure interviews, choose participants, conduct the interview, and organize data.

Appendix A

Sample Action Research Proposal

Sample Action Research Proposal

Question: What strategies work best to increase parent/family involvement for middle school students?

Rationale: The extent of family involvement in schools and with their children's learning usually diminishes beginning in grade seven or eight (Epstein, 1998). Family involvement is low in our school; yet those students whose parents most frequently initiate contact with the school and attend school-community outreach activities are usually those with high achievement. Learning what motivates these families to be involved as well as testing strategies to increase family involvement for students with low achievement and low family involvement may result over time in improved student achievement and behavior.

Work Plan: I propose to interview 30 parents with high involvement with the school to learn which, if any, current school outreach activities they most value and any other factors that motivate them to become informed and involved. I will design outreach activities for families based upon findings from the interviews and implement these with students and families (10) with lowest levels of involvement with the school. I will document incidents of increased involvement with the school for members of families of target students. At the conclusion of the project, I will administer a survey to all targeted families asking them to rate the effectiveness of strategies used and to identify any changes in their child's achievement, learning, or behavior that they may have attributed to family involvement during the year. Also, I will ask target students to note briefly their observations of their family's involvement and any changes in their own achievement or behavior that may relate.

Time Line: September through June, current school year;

Milestones:

- completion of parent/family interview questions, critique by volunteers, and revision of survey—September 10
- telephone/on-site interviews with parents/families with high involvement with school—September
- identification of target students and families—September 30
- analysis of interview data and design of five parent/family involvement activities and implementation schedule—October 15
- implementation of five parent/family involvement activities—October 16-May 16
- documentation of incidents of involvement by families of targeted students—ongoing
- administration of end-of-project surveys—June 10; analysis of data and summarization of findings—July 1

References: Principal; PTA president; Site Council parent and community representatives; colleagues; parent and family-related Web sites; *School, Family, and Community Partnerships: The ABCs of Parent*

Involvement in Education; national and state affiliates of the Parent Teacher Association; the Afterschool Alliance; U.S. Department of Education publications and Web site; the Partnership for Family Involvement in Education; etc.

Data Sources:

- Effective Family Involvement Strategies Interview (to be designed) for highly involved families
- Family Involvement Log (to be designed) to document frequency of participation in involvement strategies or other contacts from families of targeted students
- Family Involvement Strategy Effectiveness Surveys for families of target students
- Family Involvement Reflection Forms for target students

Documentation and Evaluation: Analysis of data from measures cited above, anecdotal information gathered during the project, and unsolicited involvement by families of target students which documents increased family involvement correlated to specific involvement strategies implemented.

Reflection: What other family involvement strategies were identified during the project but not implemented? Were some methods uniformly successful or was effectiveness perceived differently by various families? What suggestions do families or students have for improving involvement with the school? Which strategies will I use next year with all students and their families; which won't I use again; and which will I use for selected student families and what factors should determine this?